

DTS for approval

Executive Engineer
Hebbal Division
Bruhat Bangalore Mahanagara Palike

SECTION 8 : BILL OF QUANTITIES

Name of the Work: Providing Water Supply at Govindappa Layout in ward No. 18

Tender Notification: EE/H/TEND/18/11-12 date: 23/02/2012

Item No: 01

Issued to Sri..... Original / Duplicate.

Sl. No	Description of item	Quantity	Unit	Estimated Rates	Rate (Rs)		Amount (Rs.)
					In figures	In words	
1	Carrying out geophysical survey Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS or PWSS by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Geophysical investigation of existing Ground Water in the vicinity, its quality, quantity & acceptability of the users indicating the location of site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth 1.0 mtrs in consolidated formation for aquifer proposed to be tapped probable yield and other information required including transportation of instrument and accessories to work site, engaging technical personal and labour required etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	1900.00			
2	Sinking of borewell of 165mm clear using super fast hydraulic rig of capacity 250 PSIG & above 900 MCF & above in all strata including over burden upto 22m, fixing of casing pipes, collars and cap with necessary cutting and threading including transportation of rig and supporting vehicles, screw charges and cost of consumables, etc., complete including yield testing at the final depth with a minimum working of compressor for one hour, all as specified Upto 50mtrs depth etc., complete as per specifications and direction of the Engineer-in-Charge	50.00	Rmtrs	287.00			
2(a)	Above 50mtrs upto 100mtrs.	50.00	Rmtrs	379.00			
2(b)	Above 100 mtrs upto 150 mtrs.	50.00	Rmtrs	422.00			
2(c)	Above 150 mtrs upto 200 mtrs.	50.00	Rmtrs	464.00			
2(D)	Above 200mts upto 250mts	50.00	Rmtrs	513.00			
2(E)	Above 250mts upto 300mts	50.00	Rmtrs	550.00			

Contractor

Executive Engineer (H)
Bruhat Bangalore Mahanagara Palike

Sl. No	Description of item	Quantity	Unit	Estimated Rates	Rate (Rs)		Amount (Rs.)
					In figures	In words	
3	Supply of ISI mark 175 nominal bore, plain end steel casing pipe grade of steel free 410 of wall thickness 5.4mm thick confirming to IS 4270:2001 and latest amendments electric resistance welded steel tube material and confirming to IS 1387/1993 and manufactured by basic open hearth electric or basic oxygen process in random length of 5 to 7mtrs., both end threaded confirming to IS 554/1985, one end fixed with socket confirming to IS 4270:2001 and the other end with screwed pipes. All pipes shall be reasonably free from defects. The tubes shall be reasonably straight should be with ISI marking, weighing 25.10kg mtr., (inclusive of all taxes and duties) prices include collar medium duty etc., complete as per specifications and direction of the Engineer-in-Charge	24.00	Rmtrs	1325.00			
4	Providing 175mm dia MS collar etc., complete as per specifications and direction of the Engineer-in-Charge	6.00	Nos	150.00			
5	Providing 175mm dia. bore cap etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	100.00			
6	Supply and delivery of submersible pump sets suitable for borewell of 165mm dia with specified duty conditions as detailed below and satisfied in BIS with ISI mark with a minimum efficiency of 42% pump shall Confirm to IS 8034/2002 and motor confirming to IS 9283/1995 with ISI certification with latest amendments for the following etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	47200.00			
7	Providing & fixing in galvanized/ mild steel tubes (Heavy class as per IS 1239 part-1990) 65mm dia nominal bore with all fittings including cost of all materials labour charges HOM of equipment and testing and testing etc., complete as per specifications and direction of the Engineer-in-Charge	100.00	Mtrs	468.52			
8	Supply heavy duty galvanized/ mild steel color suitable for 65mm dia normal bore galvanized /mid steel etc., complete as per specifications and direction of the Engineer-in-Charge	35.00	Nos	427.00			
9	Supply of galvanized / mild steel union suitable for 65mm dia. nominal bore galvanized/ mild steel tube etc., complete as per specifications and direction of the Engineer-in-Charge	35.00	Nos	440.70			
10	Supply of galvanized/mild steel elbow suitable for 65mm dia. nominal bore galvanized / mild tube etc., complete as per specifications and direction of the Engineer-in-Charge	35.00	Nos	187.10			

Sl. No	Description of item	Quantity	Unit	Estimated Rates	Rate (Rs)		Amount (Rs.)
					In figures	In words	
11	Supply of non return valve suitable for 50mm nominal bore galvanized / mild steel tube etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	1114.06			
12	Suppling of on load charges over switches 4 poles, 415v 5hz Ac supply 100-125 amps Group A etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	9845.00			
13	Supplying and fully automatic star-delta unit push button type with suitable wires, 3 contractors, one adjustable thermal timer mounted on a common base plate held in steel enclosure for use on 440/440 volts 3 phase and wired after to the existing wooden board for motor 12.5 HP etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	5665.00			
14	Supply,fixing and wiring rotary selector swith suitable for voltameter etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	264.00			
15	Supplying shunt capacitors conforming to SI 2843, 3 phase 400/440 volts grade for power factor improvement of rotting machinery. Capacitor in KVAR rating nos etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	264.00			
16	Erection of single phase preventor ammeters / including fixing selector switch / current operated earth leakage circuit breakers voltage operated earth leakage circuit breakers voltage operated circuit breaker / above 100A fuse channel set (3 Nos) HRC fuses above 100A (3 Nos) including wiring using suitable capacity wires, bolts, nuts, screws etc, including transportation charges from stores to spot etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	1500.00			
17	Fixing of shut capacitor..... KVAR capacity with necessary clamps, bolts and nuts to an existing wooden or metal board including banking of more than one capacitor. Upto 5KVAR. etc., complete as per specifications and direction of the Engineer-in-Charge	3.00	Nos	110.00			

Sl. No	Description of item	Quantity	Unit	Estimated Rates	Rate (Rs)		Amount (Rs.)
					In figures	In words	
18	Fabricating, supplying and mounting 1200x900x350mm MS box made out of 18SWG suitable for floor/wall mounting, fully weather proof with double slanted top as per drawing with provision for better heat dissipation provided with hinged front cover with clear clamped to the door on EB meter side to facilitate meter reading, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with approved colour enameled metal paint etc., complete box of 36200 sqcm etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	7866.00			
19	Supplying & fixing miniature circuit breakers/ isolators on existing MCB distribution boards using necessary fixing materials and wiring complete as required. 32 to 63amps triple pole etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	2090.00			
20	Supplying, fixing of special type lamps on existing board of halogen lamps etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	143.00			
21	Supplying & fixing angle iron frame work fabricated out of MS angle iron and MS flat with bolts, nuts, washers etc., and painted with 2 coats of red oxide and other two coats of approved paint. (a) Angle iron 40x40x6mm etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	231.00			
22	Supplying and running of GI Copper strips or groundig connections using necessary fixing materials required of 600x600x3mm GI pipe etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	1072.50			
23	Supplying & fixing angle iron frame work fabricated out of MS angle iron and MS flat with bolts, washers etc. 75x75x6mm etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	473.00			
24	Supplying & drawing each PVC insulated 650/100V grade wire in the conduit (open or concealed systems of wiring) 7/0.036" (7/20) (Remarks: Copper Wire) etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	198.00			

Contractor

Executive Engineer (H)
Bruhat Bangalore Mahanagara Palike

Sl. No	Description of item	Quantity	Unit	Estimated Rates	Rate (Rs)		Amount (Rs.)
					In figures	In words	
25	Supplying and running GI/Copper conductor for grounding and (along with other wires of CTS or conduit system of wiring) using if necessary suitable size clamps bolts and nuts and washers etc.,(P-38 I-10, (c) 8SWG GI Wire etc., complete as per specifications and direction of the Engineer-in-Charge	10.00	Mtrs	15.40			
26	Supplying and fixing cast aluminium round or oblong type bulk head fitting with GI wire guard, glass cover with 60/100Watts 230v GLS lamp as required Group B (other approved make) etc., complete as per specifications and direction of the Engineer-in-Charge	5.00	Nos	187.00			
27	Supplying & drawing 3core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor conforming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and sheathed suitable for working voltage upto 1100V C. 4Sq.mm of 56 strands 0.3mm dia Group A etc., complete as per specifications and direction of the Engineer-in-Charge	300.00	Mtrs	159.50			
28	Supplying & replacing one of the fuse cutouts having porcelain base of approved quality on the existing wooden block and wired etc., complete as per specifications and direction of the Engineer-in-Charge	6.00	Nos	231.00			
29	Supplying & fixing of Danger / No Admission / No Smoking board made out of MS sheet metal with two coats of Non corrosive enameled paint etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	45.00			
30	Supplying, fixing, wiring, earth electrode for grounding conduits, IC cutouts and other equipments on the meter board using 40mm dia. 2.90mm thick GI pipe 2.5mtr. long buried in a pit. The Pit should be filled with equal proportion of salt and charcoal 150mm around the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 120mm dia. bolt, nuts, washers and checknuts etc., the pipe shall have 16 through of 122mm dia etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	1650.00			

Sl. No	Description of item	Quantity	Unit	Estimated Rates	Rate (Rs)		Amount (Rs.)
					In figures	In words	
31	Supplying and LTUG cable having aluminium conductor PVC insulated sheathed, galvanized steel wire/steel tape armoured cable with PVC outsheathing 1.1KV class (conforming to IS 1554) 4 core 16sqmm PVC cable etc., complete as per specifications and direction of the Engineer-in-Charge	40.00	Mtrs	159.50			
32	Labour charges for laying 1.1KV class UG cable when supplied departmentally/agency in existing trench GI pipe/stoneware pipe/on wall/on pole as required, (P-59 I-10(a) 6sqmm to 16sqmm etc., complete as per specifications and direction of the Engineer-in-Charge	40.00	Rmtrs	5.50			
33	Digging of trench of 0.6m deep x 0.50mtr. wide refilling the trench to the required ground level and consolidating etc., etc., complete as per specifications and direction of the Engineer-in-Charge	35.00	Rmtrs	55.00			
34	Supplying & fixing of class A GI pipe on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1 1KV class. 40mm upto 16sqmm etc., complete as per specifications and direction of the Engineer-in-Charge	10.00	Nos	242.00			
35	Supplying & fixing LT Iron pot heads suitable for 1.1KV class UG Cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts and nuts and washers etc., 15sqmm 2/4 cores. etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	264.00			
36	Supplying & fixing guy set for items 1a) and b) (wherever span exceeds 10mm) formed out of not less than 4mm (8SWG) GI Wire with eye bolt or 10mm) formed out of not less than 12mmdia with cement concerning work including one break insulator as per approved drawing. If a suitable wall or RCC roof is not available for anchoring guy sets the anchoring has to be done by fixing GI wire to the rafter of the title or absetors etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	175.00			
37	KSRB 2-2.2: Earthwork excavation for foundation of buildings, water supply, sanitary pipe liens and electrical conduits either in pits in trenches upto 600mm in width (note 1 to KSRB 2.2 page 10) in hard soil not exceeding 1.5m depth including the bottom and sides of pits and trenches stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods co etc., complete as per specifications and direction of the Engineer-in-Charge 1x20.00x0.60x0.90	10.80	Cum	213.06			

Executive Engineer (H)

Bruhat Bangalore Mahanagara Palike

Contractor

Sl. No	Description of item	Quantity	Unit	Estimated Rates	Rate (Rs)		Amount (Rs.)
					In figures	In words	
38	Refilling available earth around pipe lines, cables in layers not exceeding 20cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50m and lift upto 1.50m. including cost of all labour 1x20.00x0.60x0.90 -10.80 etc., complete as per specifications and direction of the Engineer-in-Charge	10.80	Cum	57.24			
39	Providing and fixing in trenches galvanized / mild steel tubes (medium grade) 50mm dia nominal bore with all fittings including cost of all materials, labour charges, HOM of equipment and testing etc., complete as per specifications and direction of the Engineer-in-Charge	4.00	Rmtrs	299.98			
40	Providing and installation at site work P.V.C. pipes including cost of pipes and specials and labour including lowering into trenches, laying true to line level and perfect linking of joints, leak proof including jointing of approved type with all labour and lift charges with an initial lead of 5kms. Including encasing the pipe alround to a depth not less than 15cms. with gravel or selected earth available from the excavation etc., complete. 63mm (6KSC) etc., complete as per specifications and direction of the Engineer-in-Charge	20.00	Mtrs	1325.00			
41	Providing & fixing gun metal wheel valve conforming to IS specification of approved make as per direction including all lead and lift etc., complete. 50mm dia etc., complete as per specifications and direction of the Engineer-in-Charge	1.00	Nos	1972.66			
42	KSRRB M200-12.2: Dismantling of existing structures like culverts, bridges retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work including T & P and scaffolding wherever necessary sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres complete as per specification.i) Lime/Cement concrete. I.By Manual means : A. Lime/Cement Concrete, I.By Manual means : B cement concrete Grade M-15 & M-20 etc., complete as per specifications and direction of the Engineer-in-Charge	9.71	Cum	288.32			

Sl. No	Description of item	Quantity	Unit	Estimated Rates	Rate (Rs)		Amount (Rs.)
					In figures	In words	
43	KSRB 2 - 2.2 : Earth work excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m. after breaking of clods 2x27mts x 0.90 x 0.60 = 29.16 etc., complete as per specifications and direction of the Engineer-in-Charge	29.16	Cum	213.06			
44	Providing and fixing PVC of 63mm dia 6kg/cm ² etc., complete as per specifications and direction of the Engineer-in-Charge	10.00	Rmtrs	1325.00			
45	KSRB 2.6 : Providing and filling sand in foundation upto plinth to required depth for sub soil treatment including watering ramming with lead upto 50m. and lift upto 1.5m etc., complete as per specifications and direction of the Engineer-in-Charge	7.08	Cum	1279.42			
46	KSRB 2.3 : Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with a lead upto 50m and lift upto 1.5m including cost of all labour etc., complete as per specifications and direction of the Engineer-in-Charge	14.57	Cum	95.40			
47	Providing and fixing Chlorinated Poly Vinyl Chloride (CPVC) pipes conforming to IS 15778 having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings this includes jointing of pipes and fittings with one step solvent cement, trenching, refilling & testing of joints complete (external work) 20mm nominal OD pipes etc., complete as per specifications and direction of the Engineer-in-Charge	62.40	Rmtrs	116.60			
48	KSRB13-1.1 : Providing and fixing to wall, ceiling and floor galvanised / mild steel tube 20mm dia nominal bore with fittings (medium grade weight 1.65 kg/ mtr) B class including cost of all materials, labour charges, HOM of equipments and testing etc., complete as per specifications and direction of the Engineer-in-Charge	31.20	Rmtrs	167.48			
49	KSRB 13.6.3-7 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 65mm nominal bore including cost of all materials, labour and HOM of equipments with all leads etc., complete as per specifications and direction of the Engineer-in-Charge	3.00	Nos	1972.66			

Sl. No	Description of item	Quantity	Unit	Estimated Rates	Rate (Rs)		Amount (Rs.)
					In figures	In words	
50	KSRB 13.6.2-2 : Providing and fixing in position brass stop cock of approved quality 20mm nominal bore including cost of all materials, labour and HOM of equipments with all leads etc., complete as per specifications and direction of the Engineer-in-Charge	26.00	Nos	135.68			
51	Gi pipe fittings ELBOW 20MM etc., complete as per specifications and direction of the Engineer-in-Charge	52.00	Nos	17.80			
52	Gi pipe fittings SOCKET 20MM etc., complete as per specifications and direction of the Engineer-in-Charge	26.00	Nos	17.80			
53	Lead for Disposal of Debris shall be payable at Carriage rates by Mechanical means including loading and unloading. From 00.00 to 10.00Km Conveying etc., complete as per specifications and direction of the Engineer-in-Charge	9.71	Cum	93.07			
Total Tender (Price in Figures) :							
(in Words) :							

Note:

- Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities (refer: ITB Clause 7.2 and CC Clause 33.2)
- Unit rates and prices shall be quoted by the Tenderer in Indian Rupees.
- Where there is a discrepancy between the rate in figures and in words, the lower of the two will govern. [ITB Clause 19.1 (a)]
- Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern. [ITB Clause 19.1 (b)]